

IN THE CLAIMS

1. (currently amended) An apparatus for facilitating fusion of adjacent vertebrae, comprising:

an implant body dimensioned for positioning within an intervertebral space between upper and lower vertebrae to maintain the vertebrae in desired spaced relation to facilitate fusion thereof, said implant body including lower and upper surfaces for engaging the respective lower and upper vertebrae, and first and second side wall portions extending between said upper and lower surfaces, said first and second side wall portions being substantially solid, at least one of said first and second side wall portions having a substantially narrow longitudinal slit defined therein arranged to enhance flexibility of said one side wall portion wherein said implant body includes two or more bores extending through said upper and lower surfaces for reception of bone growth inducing substances, said bores having intersecting wall portions forming a communication path extending from said upper to said lower surface, said bores in communication with said slit.

2. (original) The apparatus according to claim 1 wherein each of said first and second side wall portions includes said longitudinal slit.

3. (cancelled)

4. (cancelled)

5. (previously presented) The apparatus according to claim 1 wherein said two or more bores of said implant body are generally cylindrically-shaped bores.

6. (cancelled)

7. (currently amended) The apparatus according to claim 5 wherein said generally cylindrically-shaped internal bores are arranged in adjacent side by side relation and have open sides forming a the communication path to adjacent bores.

8. (original) The apparatus according to claim 1 wherein said upper and lower surfaces include a plurality of ridges, said ridges dimensioned to engage the respective upper and lower vertebrae to facilitate retention within the intervertebral space.

9. (original) The apparatus according to claim 1 wherein said upper and lower surfaces include a plurality of grooves defined therein, said grooves defining surfaces dimensioned to engage the respective upper and lower vertebrae to facilitate retention within the intervertebral space.

10. (original) The apparatus according to claim 1 wherein said implant body includes leading and trailing end portions, at least one of said leading and trailing end portions having a tapered surface.

11. (original) The apparatus according to claim 10 wherein said one of said leading and trailing end portions includes upper and lower tapered surfaces.

12. (original) The apparatus according to claim 11 wherein each said leading and trailing end portions include said upper and lower tapered surfaces.

13. (previously presented) The apparatus according to claim 5 further including a bone growth inducing substance disposed within said cylindrically-shaped bore, said bone growth inducing substance defining a substantially cylindrically-shape corresponding to said cylindrically-shaped internal bore of said implant body.

14. (currently amended) A method for fusion of adjacent vertebrae, comprising the steps of:

accessing the intervertebral space defined between adjacent vertebrae;

providing an implant including an implant body having lower and upper surfaces and first and second side wall portions extending between said upper and lower surfaces, said first and second side wall portions being substantially solid, at least one of said first and second side wall portions having a substantially narrow longitudinal slit defined therein arranged to enhance flexibility of said one side wall portion, said implant having an internal cavity formed

by at least two bores extending between the upper and lower surface in communication with said slit said bores having side walls in continuous communication between said upper and lower surfaces; and

positioning said implant within the intervertebral space whereby said upper and lower surfaces engage upper and lower vertebral portions of adjacent vertebrae in supporting relation therewith while said longitudinal slit permits compressive movement of said implant body in response to a load exerted by the vertebral portions.

15. (previously presented) The method according to claim 14 further including the step of introducing bone growth inducing substances within said at least two bores to facilitate fusion whereby said implant body and said bone growth inducing substances share the load exerted by the vertebral portions.

16. (previously presented) The method according to claim 15 wherein said implant body defines at least two generally cylindrically-shaped bores extending through said upper and lower surfaces and further including the step of harvesting a substantially cylindrically-shaped bone graft for positioning within said bore.

17. (original) The method according to claim 16 wherein the step of harvesting includes using a trephine to harvest the bone graft.

18. (previously presented) The apparatus as set forth in claim 5 wherein there are three internal bores further including a generally cylindrical bone substitute plug within each of said generally cylindrical internal bores.

19. (previously presented) The apparatus as set forth in claim 18 wherein the cylindrical internal bores are arranged in adjacent side by side relationship.

20. (currently amended) A kit for fusion of adjacent vertebra comprising:
a plurality of implants, each having an implant body including upper and lower surfaces for engaging respective adjacent vertebra and sidewall positions extending between said upper and lower surfaces and surrounding an internal cavity having a plurality of generally

cylindrical internal bores open to said upper and lower surfaces, said bores having sides in open communication with adjacent bores continuously from the upper to the lower surface of the implant; and

a plurality of bone plugs sized to fit into each of said cylindrical internal bores.

21. (previously presented) The kit as set forth in claim 20 wherein each implant internal cavity has three internal bores and a plug is provided for fitting into each bore.

22. (previously presented) The kit as set forth in claim 20 wherein the bone plug material is selected from the group consisting of allograft bone, autograft bone, bone morphogenic proteins, bioceramics and hydroxyapatite.

23. (previously presented) The kit as set forth in claim 22 wherein each of said plurality of implant bodies includes a slit in the sidewall in communication with said generally cylindrical bores.

24. (currently amended) An apparatus for facilitating fusion of adjacent vertebrae, comprising:

an implant body dimensioned for positioning within an intervertebral space between upper and lower vertebrae to maintain the vertebrae in desired space relation to facilitate fusion thereof, said implant body including lower and upper surfaces for engaging the respective lower and upper vertebrae, and first and second side wall portions extending between said upper and lower surfaces, said first and second side wall portions being substantially solid wherein said body has an internal cavity formed by ~~a plurality of three~~ bores extending between the upper and lower surface, said bores having sidewalls in open communication with adjacent bores.

25. (previously presented) The apparatus as set forth in claim 24 wherein said first and second sidewalls have a longitudinal slit in communication with each of said bores.

26. (previously presented) The apparatus as set forth in claim 25 wherein said bores are generally cylindrical.

27. (new) The apparatus as set forth in claim 1 wherein said implant includes three bores.